

## 2014 EVMS Surveillance Corrective Action and Continual Improvement Status

Last Update: 30-November-2015

CARs, CIOs, and RCCs	Fermilab Responses to CAR-01	Updated	Status	Comments
CAR-01 Traceability -The information provided to the reviewers lacked key elements to allow for a cradle-to-grave traceability to confirm that Baseline Change Requests were implemented in accordance with the EVMS System Description. (GL-28-29-31)	Ensure WADs are updated in a timely manner after a BCR is approved	Aug-15	Complete	Expectations for WAD updates have been established and communicated to all projects. The projects understand that timely updates are needed as part of the BCR documentation process. WADs are being updated in a timely manner.
	Incorporate Improvements to BCR Log including: Clarification of FNAL BCR Log standards to include contingency, management reserve and undistributed budget tracking. Also, Standardized WAD update information.	Jun-15	Complete	Standards have been established and reviewed with Projects to ensure they made changes to meet the standards. However, some latitude is given for project tailoring to meet specific needs.
	Improve BCR Form including identification of required approval level and separate fields for BCR reason/justification.	Apr-15	Complete	Projects have been made aware of standards and have made changes to utilize standard forms. However, latitude is given for project tailoring to meet specific needs and tool preference i.e. Access or MS word (see general note). Required approval level is a complex matrix and outlined by Project Execution Plan (PEP), which is well understood by Project Managers (PM) and Federal Project Directors (FPD). It was determined that adding complexity to BCR form specifying how to determine the required level of approval was not part of the form's purpose or requirements, but indication i.e. identification of that determination was added to the standard form.
	Standardize BCR reports including schedule layouts and budget reports.	Mar-15	Complete	Standards have been established and reviewed with Projects to ensure they made changes to meet the standards. However, some latitude is given for project tailoring to meet specific needs (see general note below).
CAR-02 Properly identify and track MR, UB and contingency - Tracking for MR, UB, and contingency for CMS Project not in compliance with EVMS Change Control Procedure (GL-14-15).	Incorporate Improvements to BCR Log including: Clarification of contingency, Management Reserve and Undistributed Budget tracking.	Jun-15	Complete	Standards have been established and reviewed with Projects to ensure they made changes to meet the standards. However, some latitude is given for project tailoring to meet specific needs (see general note).
CIO-01* Continue to improve the variance analyses to remove quality variability (GL-23).	FNAL CAMs and Project Controls staff will judiciously complete the incomplete variance reports and incorporate standardized expectations in all variance reports.	Jul-15	Complete	Expected standards have been established regarding VAR accuracy and completeness. Incomplete or inadequate VARs have been reviewed and were prudent been updated. More importantly the projects understand the importance of VARs as a historical record and necessary tool for monitoring the project health. The project managers continually monitor VARs for accuracy, completeness, and to ensure transparency.
	FNAL CAMs and Project Controls staff (PCS) will review the guidelines for correcting errors in the EVMS data so the reporting of BCWS, BCWP and ACWP is consistent.	Mar-15	Complete	FNAL CAMs and PCS are aware of the standards for correcting errors in EVMS data.
CIO-02* Continue to examine the use of LOE tasks to ensure that they are being appropriately used (GL-12).	Standards for using LOE tasks are under continual review.	Aug-15	Complete	Standards for LOE usage have been discussed by PCS, OPSS, and Bi-monthly PMO lab leads. This topic has been specifically challenged and address by PMO lab leads and a consensus of the standard has being resolved. All Projects understand the issues that LOE activities present and have taken steps to minimize their use.

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CIO-03* Continue to refine the calculation of Estimate at Completion (EAC) to be standardized across the projects and better reflect CAM/PM assessments (GL-27).	The EAC process is continually being refined to ensure projects will be proactively engaged with cost and schedule impacts. More guidance, training, and oversight of the process will continually be developed to improve EAC implementation.	Jul-15	Complete	The EAC standards have been addressed by OPSS Project Controls Management. These standards have been addressed in discussions and training of PCS, PMs and CAMs. EVMS CAM training has been developed to address EAC standards and implementation.
CIO-04* The Corrective Action Logs, that reflect corrective actions identified during the variance analysis process, require standardization of the methodology so they can be tracked to completion by the PMs/CAMs and provide a single source of issues for Fermilab Management (criteria, process, and timely updates) (GL-26).	FNAL has taken an initiative to standardize its forms and logs including the Corrective Action Log.	Jun-15	Complete	Standards have been established and reviewed with Projects to ensure they made changes to meet the standards. However, some latitude is given for project tailoring to meet specific needs (see general note).
CIO-05* Recommend options for PARS II reporting to the FPD and obtain FPD approval or further direction (GL-25).	Each project is working with their respective Federal Project Director to develop the reporting level, reporting thresholds, and documentation requirements.	Jul-15	Complete	Each project reviews standards and expectations with their Federal Project Director prior to ESAAB approval and PARS II reporting.
CIO-06* Review and validate the accuracy of the schedule logic. Perform schedule clean-up (including integrity checks) on a regular basis. CAMs should be trained to better understand how their sub-projects roll up into the master project schedule and which high level project milestones they impact (GL-6).	FNAL projects are continuing to perform schedule clean up and integrity checks. A detailed critical path analysis is also being performed by the projects to ensure the integrity of the critical path. FNAL has identified the risk of CMS Project utilizing one project scheduler, who performs the initial schedule input and all data integrity checks. This risk is being addressed by the project and OPSS. CAMs understand the use, risks and interactions of sub-project is being addressed in future training.	Aug-15	Complete	Projects are continually assessing schedule integrity. Critical path analysis and other schedule integrity issues are addressed with each BCR and during monthly update. Support by Project Controls Specialist are continually reviewed and appropriate back-up personnel have been identified. Annual and ongoing training addresses interactions between sub-project. However, for clarity none of the FNAL projects have true sub-project per se; rather, they have separate P6 files which FNAL refers to as sub-project. The terminology is also being clarified via training and ongoing discussions.
CIO-07* Continue CAM training to include accruals and information on Lab indirect expense (GL-4, GL-16, GL-19).	Future CAM training to include information on the indirect budget and rates with an increased focus on how they impact projects is being planned.	Aug-15	Complete	Budget and rate practices are generally out of the control of CAMs. However, understanding the impacts to the project and planning process has been developed and integrated into Project/CAM training modules.
	Future accrual and status training for CAMs is being planned.	Aug-15	Complete	Accrual and status training has been developed and integrated into Project/CAM training.
CIO-08* Continue to ensure that there are no retroactive changes to the BCRs (GL-30).	FNAL understands the importance of maintaining historical integrity during BCRs. The standardized BCR reports will demonstrate and ensure history is not changed.	Aug-15	Complete	Historical integrity has been addressed with each project. The projects and OPSS are continually monitoring the projects to ensure historical data is not being inappropriately changed.
CIO-01 The number of cost and schedule reports supporting the BCRs varied across the projects. A Fermilab Change Control Process/Procedure should be standardized for consistent implementation across the projects (GL-9, GL-32).	FNAL has taken an initiative to standardize its forms and logs including BCR documentation and attachments.	Jul-15	Complete	Standards have been established and reviewed with Projects to ensure they made changes to meet the standards. However, some latitude is given for project tailoring to meet specific needs (see general note).
	Work with the Project Managers to determine greatest need/value for those procedures that do not exist or need to be updated	Aug-15	Complete	After having discussed these topics with Project and OPSS personnel several deficiencies have been identified. These deficiencies have been addressed.
	Develop a prioritized list of procedures, processes, desktop instructions and training that need updates or development because they do not exist or do not adequately perform their function.	Nov-15	Complete	Ongoing discussion with PCS and PM personnel have produced a list of procedures, processes, desktop instructions and training that need updates or development because they do not exist or do not adequately perform their function. These items are systematically being worked through and deficiencies are being addressed.

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RCC-01 There is a continuing need to develop standardized Fermilab EVMS processes and procedures (that allow tailoring) to ensure that direction/guidance is provided to the project staffs, regardless of the projects.	Based on the priority of need, develop a schedule for developing or revising the procedures, processes, desktop instructions, and training.	Nov-15	Complete	Completed, see above.
	Identify lead people for developing/revising the procedures, processes, desktop instructions, and training.	Nov-15	Complete	Lead people have been identified and tasks have been completed.
	Update the existing procedures, processes, and desktop instructions that are in place to provide the most current and up-to-date information.	Nov-15	Complete	Deficiencies in existing procedures, processes, and desktop instructions have been identified and have been updated.
	Track and report progress of procedures, processes, desktop instructions, and training updates and development against the plan.	Nov-15	Complete	Progress of procedure, process, desktop instructions, and training updates are being monitored and reported against the plan.
	Continually assess EVMS processes, procedures, desktop instructions and training.	Aug-15	Complete	Assessment of EVMS processes, procedures, desktop instructions and training is continuing. Although the wording may imply this action to be open-ended, FNAL OPSS believes the commitment to this process has appropriate focus to warrant completion of this action.

General Note regarding Standardization: Standardization is interpreted as establishing and communicating minimum requirements. This is accomplished by providing templates and examples. Where possible, these templates are strongly encouraged but if the project determines that the project is better managed and data is best understood by the project using another variation this is allowed, provided the minimum requirements are met. This direction was reached after careful consideration and investigation which found no requirement that all project must or should take a "one size fits all approach" to management forms or reports. FNAL also determined that due to the complexity, variety, and various stakeholder requirements of the present and future projects that this approach is practical, necessary, and desired.

General Note regarding CIOs requesting to "Continue": The wording in several of the CIOs requesting to continue or continuing, may imply these actions to be open-ended. FNAL OPSS believes that when significant commitment to this process has appropriate focus, FNAL is warranted to call this action complete.